WAC 296-104-300 is deleted in its entirety and replaced by the following.

WAC 296-104-300 Installation -- What control and limit devices are required on automatically fired boilers prior to June 1989? All automatically fired steam, vapor, or hot water boilers except boilers having a constant attendant who has no other duties while the boiler is in operation, shall be equipped with:

(a) An automatic low-water fuel cut-off; and

(b) An automatic water feeding device.

(c) All devices shall be designed so that they may be readily tested at frequent intervals.

WAC 296-104-301 Installation -- What control and limit devices are required on automatically fired boilers after June 1989?

In addition to those requirements listed in WAC 296-104-300, the following are also required:

(a) All boilers that are automatically fired low pressure steam heating boilers, small power boilers, and power steam boilers without a constant attendant who has no other duties shall be equipped with:

(i) Two high steam pressure limit controls, the highest of which shall be provided with a manual reset.

(ii) Two low-water fuel cut-offs, one of which shall be provided with a manual reset device and independent of the feed water controller.

(iii) Coil type flash steam boilers may use two high-temperature limit controls, one of which shall have a manual reset. This is instead of the low-water fuel cut-off.

(iv) All control and limit devices shall be independently connected and electrically wired in series.

(b) All automatically fired hot water supply, low-pressure hot water heating boilers, and power hot water boilers shall be equipped with:

(i) Two high-temperature limit controls, the highest of which shall be provided with a manual reset.

(ii) One low-water fuel cut-off with a manual reset and independent of the feed water controller.

(iii) For coil type hot water boilers a low-water flow limit control installed in the circulating water line may be used instead of a low-water fuel cut-off.

(iv) All control and limit devices shall be independently connected and electrically wired in series.

WAC 296-104-302 Installation -- What control and limit devices are required on automatically fired boilers after December 1998?

In addition to those requirements listed in WAC 296-104-301, the following are also required with regard to installations or refits of gas, oil, or combinations of gas or oil:

(a) All boilers excluding lined potable water heaters of all BTU input installed or refitted after December 1998, with fuel input ratings of less than 12,500,000 BTU/hr which are fired by gas, oil, or a combination of gas or oil shall comply with the fuel train requirements defined in ASME CSD-1 (CF), as adopted in WAC 296-104-200 where applicable.

(b) Verification of fuel train compliance will be per CSD-1. A CSD-1 report will be completed and signed by an authorized representative of the manufacturer and/or the installing contractor.

(c) The CSD-1 report must be made available to the authorized inspection agency or the inspector after which a certificate of operation may be issued. The report shall remain in the possession of the boiler owner.

WAC 296-104-303 Installation -- What control and limit devices are required on automatically fired boilers after December 2004?

In addition to those requirements listed in WAC 296-104-302, the following are also required with regard to installations or refits of gas, oil, or combinations of gas or oil:

(a) A manually operated remote shutdown switch or circuit breaker shall be located just outside the boiler room door and marked for easy identification. Consideration should be given to the type and location of the switch to safeguard against tampering. If the boiler room door is on the building exterior, the switch should be located just inside the door. If there is more than one door to the boiler room, there should be a switch located at each door.

(b) A means shall be provided for testing the operation of Hot Water Heating Boiler low water fuel cut off(s) without resorting to draining the entire system. Such means shall not render the device(s) inoperable. If the means temporarily isolates the device from the boiler during testing, it shall automatically return to it's normal position.

KEE – 6/8/04